Cimarron County, August 24, 1948. This is the only place in the state where the author has seen *Pectis* growing.

Specimens of the author's plants mentioned in the above enumeration will be found in the Bebb Herbarium of the University of Oklahoma. Available duplicates will be distributed to a few other herbaria at a later date.

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NEW RECORDS FOR THE BRUCE PENINSULA, ONTARIO

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Intensive field work whenever it has been possible to get away for a few days in that Mecca of botanists, the Bruce Peninsula of Ontario, has resulted in the finding of a number of additions to its known flora. During the past five years, in addition to species not reported by the late P. V. Krotkov in the systematic list in his "Botanical Explorations in the Bruce Peninsula, Ontario" (Trans. Roy. Can. Inst. **23** (1): 3–65. 1940), new stations have been found for several rare species reported by him. Records new for the area are indicated by an asterisk in the following list.

Particular attention has been given to the Pteridophyta and the Orchidaceae of the area and all the new records here reported are in these groups. A number of the finds, especially in the Orchidaceae, are due to Mrs. Hagenah's eye for botanical novelties. Specimens of all species not reported by Krotkov and of most of the others have been deposited in the Billington Herbarium of the Cranbook Institute of Science, Bloomfield Hills, Michigan. All numbers refer to collections of the author.

*Botrychium matricariaefolium A. Br. ex Koch. Specimens of this species were collected from the sides of low hummocks in a maple-birch woods three miles south of Tobermory, July 4, 1948, *759*.

*Botrychium multifidum (Gmel.) Rupr., var. intermedium (D. C. Eaton) Farw. Found in an abandoned pasture near the cemetery at Oliphant, October 9, 1949, *1430* and *1431*.

This Grape Fern was locally abundant, more than fifty plants being found in an area about fifty yards square, and was extremely

variable as to size of both sterile and fertile plants, with some of the smaller specimens, *1432* and *1434*, approaching var. TYPICUM in appearance.

*BOTRYCHIUM DISSECTUM Spreng., var. TYPICUM. Only one sterile plant of this species was found in a mixed woods near Red Bay, although both of the following varieties were present in both sterile and fruiting condition. October 8, 1949, *1426*.

*BOTRYCHIUM DISSECTUM Spreng., var. OBLIQUUM (Muhl.) Clute. Found in a mixed woods near Red Bay, usually in old roadways, September 6, 1948, *803*. Other plants were observed here in October, 1949.

*BOTRYCHIUM DISSECTUM Spreng., var. ONEIDENSE (Gilbert) Farw. Most of the plants seen at Red Bay in 1948 and 1949 had the broad, more rounded terminal segments of this variety. September 6, 1948, *802*.

*DRYOPTERIS PHEGOPTERIS (L.) C. Chr. One small but abundantly fruiting station was found at the edge of an opening in the swamp forest surrounding a bog southwest of the village of Lion's Head, September 5, 1948, *793*.

DRYOPTERIS FILIX-MAS (L.) Schott. This species, reported by Krotkov and others only from the vicinity of Cape Croker, was found at several places in a rocky beech-maple woods northwest of Hope Bay, at least six miles from the previously reported stations, August 31, 1947, *717*.

*DRYOPTERIS CRISTATA (L.) Gray, var. CLINTONIANA (D. C. Eaton) Underw. This variety has been collected in moist depressions in a mixed woods near Red Bay, September 6, 1948, *799*, and along a stream in woods near the Stokes Bay cemetery, October 8, 1949, *1428*.

ATHYRIUM THELYPTERIOIDES (Michx.) Desv. Reported by Krotkov from one collection made near the north shore of the Peninsula, this species was found in a moist valley between two dolomite ridges northwest of Hope Bay, July 3, 1949, *916*.

*ATHYRIUM PYCNOCARPON (Spreng.) Tidestr. Found on a low hummock at the foot of a dolomite ridge in a beech-maple woods northwest of Hope Bay, July 4, 1947, and collected August 31, 1947, *720*.

This colony bore abundant fertile fronds in 1947 but only sterile fronds were found in 1948. *Phyllitis Scolopendrium*, var. *americana* and *Polystichum Lonchitis* were abundant on the dolomite ridge while only a few yards away from the hummock on lower ground was the first clump of *Dryopteris Filix-mas* found at this station.

PELLAEA ATROPURPUREA (L.) Link.

This species was reported by Stebbins (RHODORA **37:** 63–74. 1935.) from cliffs along Georgian Bay near Gillies Lake and Lion's Head. It was rare at these locations and Stebbins stressed the fact that the cliffs appeared to have escaped the fires which had ravaged much of the Peninsula in the past. However, on October 8, 1949, this species was collected from a low rocky ridge in the dolomite pavement country about six miles west of Dyer's Bay, *1429*. Although there are obvious signs of past fires throughout this pavement region the *Pellaea* was not only abundant along the ridge but was occasionally seen in crevices between layers of the pavement itself.

*LYCOPODIUM OBSCURUM L., VAR. DENDROIDEUM (Michx.) D. C. Eaton. One small colony of the Round-branched Ground Pine was found on a sandy ridge in mixed woods near Red Bay, September 6, 1948, *798*.

*LYCOPODIUM COMPLANATUM L., first found near the Stokes Bay cemetery on October 8, 1949, *1427*, and again the next day at the foot of a sand ridge marking an old Lake Huron shore line south of Oliphant, October 9, 1949, *1443*.

*LYCOPODIUM TRISTACHYUM Pursh. Collected from another sand ridge near Oliphant, August 26, 1946, *397*.

At other places in this same series of wooded ridges collections have been made which resemble this species in form but lack its bluish-green color.

CYPRIPEDIUM CALCEOLUS L., VAR. PARVIFLORUM (Salisb.) Fern.

Under the name *Cypripedium parviflorum* Salisb. this yellow lady's-slipper was reported as common by Krotkov while the variety *pubescens* was reported only from one collection by A. B. Klugh. Five seasons of field experience in the Peninsula during the blooming season have shown that the actual frequency of the two is the reverse of that given by Krotkov. Variety *parviflorum* with its characteristic dark wine-colored sepals and petals has been found at only one locality, Little Port Elgin, May 31, 1946, *311*. Variety *pubescens* with its greenish-yellow sepals and petals occurs throughout the Peninsula in a variety of habitats, even growing in small pockets of humus in the dolomite pavement district.

*HABENARIA CLAVELLATA (Michx.) Spreng., var. OPHIOGLOSSOIDES Fern. Found growing in moss at the edge of the thicket

surrounding a small bog near Lion's Head, August 31, 1947, *726*. *Cypripedium acaule* was found near by.

HABENARIA ORBICULATA (Pursh) Torr. This species, reported only from Stokes Bay by Krotkov, was observed in a mixed woods near Red Bay in 1948 and 1949.

*HABENARIA HOOKERI Torr. Found in a sandy opening in coniferous woods near the shore at Dorcas Bay, May 31, 1947, and collected in bloom on July 4, 1947, *639*.

Interesting species noted near by included *Cypripedium arietinum* and *Iris lacustris*.

*ARETHUSA BULBOSA L. Collected from grassy margins of a marly bog near Lion's Head, July 4, 1947, *638*.

LISTERA CORDATA (L.) R. Br.

This species was reported by Krotkov from Cove Island, off the tip of the Peninsula, and then only from a solitary specimen. Stebbins (l. c.) mentioned seeing it at Red Bay. This station has not been rediscovered but this elusive little orchid has been found at three places in the vicinity of Oliphant where it is sometimes abundant in small areas, May 30, 1946, *306*. It has also been observed in a mossy thicket in a bog near Lion's Head. In nearly every case it has been associated with *Habenaria obtusata*.

MALAXIS BRACHYPODA (Gray) Fern. Reported by Krotkov from a collection by [? R. F.] Cain at Sauble Beach, this species was found at two locations in the Oliphant area on July 4, 1949, *917*.

*CORALLORRHIZA MACULATA Raf., forma FLAVIDA (Peck) Farw. This form, with the entire plant yellow except for the white, unspotted lip, was found to be rather frequent in one section of a wooded slope below a cliff at Sydney Bay, July 6, 1946, *342*.

Although the typical form of the species is commonly met with elsewhere in the Peninsula, it was not here observed in the same locality with the form. However, both have since been found growing in the same woods at Hope Bay.

CALYPSO BULBOSA (L.) Oakes. Like *Listera cordata*, this orchid was reported by Krotkov from a single specimen found on Cove Island. On May 31, 1947, three plants, two with flowers, were found near Oliphant in a low coniferous woods where *Listera cordata* is abundant.

However, it may have been overlooked elsewhere because of its early blooming habit. In this connection, it may be noted

that 1947 was a late season in this area and that large snow banks were still present in arbor vitae thickets near where the *Calypso* was found in bloom.

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ANDROPOGON ELLIOTTII CHAPM. IN ILLINOIS

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The Elliott Beardgrass, principally of the coastal plains from New Jersey to Florida and Texas, extends northward to southern Missouri and southern Indiana (Hitchcock, 1935) but has not been reported to occur in Illinois. Palmer and Steyermark (1935) listed it in four Missouri counties, and Deam (1940) credited it to ten Indiana counties.

In November, 1939, L. E. Yaeger collected this grass three miles southeast of Ridgway, Gallatin County, Illinois. He found it growing in an old upland field along with persimmon, Smilax and Panicum species. This appears to have been the first collection of this grass in Illinois.

In September, 1947, I attempted to find the site of Yaeger's collection but was not successful. In April, 1949, Glen S. Winterringer collected the grass in Pope County near Waltersburg. This collection was the first after Yaeger's in 1939.

In October, 1949, while collecting plants in southern Illinois, I made ten collections of *Andropogon elliottii* in five counties. I found it chiefly in old fields associated with *Andropogon virginicus*. It formed rather large colonies, or it occurred as isolated tufts. With the exception of Yaeger's collection near Ridgway, all collections are from the southern unglaciated area of the state. Although within the glacial boundary (Illinoian), the Ridgway site is not on glacial till but on the broad, sandy terrace (Wisconsin outwash) in the Wabash valley.[1] Deam has characterized this species in Indiana as being "restricted practically to the unglaciated area where it is usually found with

[1] Personal communication from Dr. George E. Ekblaw, Illinois State Geological Survey, Urbana.